

IMPROVED ASSAY FOR PROTEIN TYROSINE PHOSPHATASES

## ABSTRACT OF THE DISCLOSURE

The invention relates in part to screening assays for identifying agents that alter the interaction between a protein tyrosine phosphatase (PTP) and its tyrosine phosphorylated polypeptide substrate, using fluorescence energy signals generated by detectably labeled substrates. Assays are provided in certain embodiments, including high throughput screening assays, wherein candidate agents are screened by fluorescence polarization for their ability to influence (i) binding of substrate trapping mutant PTPs to substrates, or (ii) dephosphorylation of tyrosine phosphorylated substrates by PTPs.